

ABSTRACT OF THE DISCLOSURE

A shift register includes unit circuits cascade-connected to form a plurality of shift stages. Each of the unit circuit has a shifter including a NAND circuit to receive an input pulse as one input thereof, and a holder having a PMOS transistor and an NMOS transistor, which are connected in series between a power supply and a clock input end fed with a clock pulse and of which gates and drains are mutually connected in common respectively. The input end of the holder is connected to the output end of the NAND circuit, and the output potential thereof is fed as another input to the NAND circuit. The odd-stage unit circuits and the even-stage unit circuits operate in synchronism respectively with clock pulses having a $1/4$ phase difference from each other. The holder holds the shifted pulse synchronously with the clock pulse, and then outputs the shifted pulse. In this structure, the number of the transistors between the positive and negative power supplies can be reduced for lowering the required supply voltage and accelerating the shift register operation.